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ACC NR: AP6013127 SOURCE CODE: UR/0057/66/086/004/0714/0719

AUTHOR: Abramovich, L.Yu.; Klyarfel'd, B.N.; Nastich, Yu. N.

ORG: All-Union Electrotechnical Institute imeni V.I. Lenin, Moscow (Vsesoyuznyy elektrotekhnicheskii institut)

TITLE: A superdense hollow cathode glow discharge

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 4, 1966, 714-719

TOPIC TAGS: glow discharge, hydrogen, helium, neon, argon, current density, gas discharge, gas discharge plasma

ABSTRACT: During investigation of hollow cathode glow discharges in H_2 , Ha , Ne , and Ar at pressures from 0.05 to 1 mm Hg the authors discovered a new type of glow discharge which they call "superdense" and in which the cathode current density can reach 50 A/cm². Both cylindrical and cup-shaped cathodes were employed, the diameters and lengths (or depths) of at least some of which were of the order of 5 cm. The discharges were pulsed (pulse length, 80-100 μ sec) to avoid excessive heating. Transition from the dense glow discharge (the terminology is that of B.N. Klyarfel'd, L.G. Guseva, and A.S. Pokrovskaya-Soboleva (ZhTF, 36, 704, 1966 /see Abstract AP6013126/)), to the superdense discharge was signalled by a sharp drop of the electrode potential and increase of the current. In spite of the low potentials and high currents (typical values are 1000 A at 300 V) and the low negative resistance of the order of - 0.1 ohm, these

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discharges were definitely not arcs; the cathode glow evenly covered the whole surface of the hollow cathode, and transition to the arc discharge was marked by the appearance of cathode spots accompanied by further decrease of the potential and increase of the current. It has not been possible to obtain superdense glow discharges with plane electrodes. Photographs of the interior of the cylindrical cathode showed that during the superdense discharge there is a several millimeter thick layer next to the cathode surface within which the plasma glows more brightly than in the remainder of the region within the cathode. It is concluded that the cathode fall region is very thin (< 0.01 cm) and that the ratio of the number of ions leaving the bright luminous region in the direction of the cathode to the number of electrons entering it is several units, which exceeds the value of the corresponding ratio in ordinary glow discharges by two orders of magnitude. The cathode current density attainable in a superdense glow discharge is limited by the appearance of cathode spots and transition to an arc discharge. It is suggested that higher current densities might be achieved by carefully cleaning the cathode surface. Orig. art. has: 2 formulas and 4 figures.

SUB CODE: 20 SUBM DATE: 24Aug65 ORIG. REF: 003 OTH REF: 003

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Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 75 (USSR) SOV/124-58-2-2021

AUTHORS: Rozenberg, M. D., Zinov'yeva, L. A., Klyarovskiy, G. V.

TITLE: Hydrodynamic Calculation Methods Relative to the Recovery of the Gas Content of a Petroleum, When the Gas Occurs in Solution (Metodika gidrodinamicheskikh raschetov dobychi poputnogo gaza pri rezhime rastvorennogo gaza)

PERIODICAL: Tr. Vses. neftegaz. n. -i. in-ta, 1957, Nr 10, pp 257-265

ABSTRACT: Presentation of a calculation method relative to the recovery of gas appearing in deposits in dissolved form, starting from the prescribed (time) rate of withdrawal of the petroleum; the proposed method employs the petroleum-balance equation and a condition which connects the mean petroleum saturation within the reservoir and the mean pressure, which varies as the recovery process progresses. This condition is obtained as a result of the numerical integration of the relationship between the values of the averaged petroleum saturation and the pressure, as supplied in a work by M. D. Rozenberg [Rozenberg, M. D., K raschetam istoshcheniya neftyanykh mestorozhdeniy pri rezhime rastvorennogo gaza (On

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Hydrodynamic Calculation Methods Relative to the Recovery (cont.)

the Calculations of the Depletion of Petroleum Deposits in the Presence of Dissolved Gas). Tr. Vses. neftegaz. n. -l. in-ta, 1957, Nr 10, pp 250-256; RZhMekh, 1958, Nr 2, abstract 2020]. The authors provide a numerical sample calculation for the determination of the recovery of the gas and adduce concepts relative to the verification and correction of such calculations with reference to production-measurement data.

V. A. Arkhangel'skiy

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KLYAROVSKIY, G. V. Cand Tech Sci -- (diss) "On the problem of obtaining samples of ~~the~~ layer petroleum in cases of regimes connected with the manifestation of dissolved gas." Mos, 1958. 15 pp (Min of Higher Education USSR. Mos Order of Labor Red Banner Petroleum Inst in Academician I. M. Gubkin), (KL, 52-58, 102)

SHAN'GIN, S.N.; ONOPRIYENKO, V.P.; KLYAROVSKIY, O.V.

Preparing oil reserves for exploitation. Geol. nefti 2 no.6:62-65
Je '58. (MIRA 11:7)

(Petroleum geology)

KLYAROVSKIY, G.V.

Effect of constant properties and composition of free gas on oil
flow in a dissolved-gas pool. Trudy VNI 12:176-187 '58.
(MIRA 12:3)
(Oil reservoir engineering)

KLYAROVSKIY, G.V.

Displacement of dissolved-gas oil by gas from a free-gas cap.
Trudy VNI 12:194-206 '58. (MIRA 12:1)
(Oil reservoir engineering)

KLYAROVSKIY, G.V.; ROZHENKO, M.D.

Hydrodynamic problems on the production of oil from pools with
free-gas caps. Trudy VNI 12:207-223 '58. (MIRA 12:3)
(Oil reservoir engineering)

KLYAROVSKIY, O.V.

Obtaining actual reservoir-oil samples isolated in a layer from oil
containing dissolved gas. Trudy VNI 12:373-391 '58.

(MIRA 12:3)

(Petroleum--Analysis)

KLYAROVSKIY, G.V.; ONOPRIYENKO, V.P.

Programming the development of flowing wells. Neft.khoz. 38
no.5:34-39 My '60. (MIRA 13:8)
(Oil fields--Production methods)

ROZENBERG, M.D.; ZINOV'YEVA, L.A.; ~~KLIAROVSKIY~~ G.V.

Method for hydrodynamic calculations of casinghead gas recovery
in dissolved gas drives. Trudy VNI no.10,257-265 '57.

(MIRA 14:6)

(Gas, Natural)

FANIYEV, R.D., kand.tekhn.nauk; KLYAROVSKIY, G.V., kand.tekhn.nauk;
SINYAGOVSKIY, I.M., inzh.

Method for accurate evaluation of producible reserves in solution
gas drive. Nauch. zap. Ukrniiproekta no.9:83-90 '62. (MIRA 16:7)
(Petroleum production)

71
5.

YAKHITOV, G.G.; SULTANOV, S.A.; ONOPRIYENKO, V.P.; KLYAROVSKIY, G.V.

Additional sectionalization of certain areas of the Romashkino
field. Neft. khoz. 40 no.10:28-33 0 '62. (MIRA 16:7)

(Romashkino region--Petroleum production)

KLYAROVSKIY, G.V.; LYSENKO, V.D.; MUKHARSKIY, E.D.; ONOPRIYENKO, V.P.

Efficiency in converting a well off to a mechanized form of
exploitation under conditions of predominant flow productio
Neft.khoz. 42 no.4:37-42 Ap '64. (MIRA 17:9)

KLYAROVSKIY, G.V.; SKRIPNIK, V.A.

Developing a pool with water drive of gaseous oil based on
a study of the Dolina oil field. Neft. i gaz. prom. no.3:
39-41 J1-S '64. (MIRA 17:12)

KLYAROVSKIY, V.M.

Characteristics of magnetite in conglomerates of the Kas River
region in Gornaya Shoriya (age of Telbess plutonic rock). Trudy
Gor.-geol.inst.Zap.-Sib.fil.AN SSSR no.13:7-15 '53. (MIRA 8:12)
(Kas Valley--Magnetite)

KLYAROVSKIY, V.M.

Axinite from the deposits of Tel'bes. Zapiski Vsesoyuz. Mineralog.
Obshchestva 82, 62-4 '53. (MLRA 6:4)
(GA 47 no.17:8597 '53)

KLYAROVSKIY, V.M.

Method of photographing a whole microsection. Zap. Vses. min.
ob-va 83 no.3:274 '54. (MLRA 7:11)

1. Zap.-Sib. filial Akademii nauk SSSR.
(Photography--Scientific applications) (Mineralogy)

KLYAROVSKIY, V.M.

Structural conditions determining the occurrences of skarn-ore
formations of the Temir-Tel'bes region in Gornaya Shoriya.

Trudy Gor.-geol.inst.sap.-Sib.fil.AN SSSR no.17:33-38 '56.
(MIRA 13:5)

(Temir-Tel'bes region(Gornaya Shoriya)--Ore deposits)

(Temir-Tel'bes region(Gornaya Shoriya)--Skarns)

KLYANOVSKIY, V.M.

**Effect of postmagmatic solutions on iron regrouping in tuffs.
Trudy Gor.-geol.inst.sap.-Sib.fil.AN SSSR no.17:71-78 '56.
(MIRA 13:5)**

(Iron)

KRYAROVSKIY, Y.M.

Boron containing ores of the Verkhne-Uchulenskoye deposit in Gornaya
Shoriya. Izv. vost. fil. AN SSSR no.1s40-43 '57. (MIRA 11s4)

1. Zapadno-Sibirskiy filial AN SSSR.
(Gornaya Shoriya—Iron ores) (Berates)

KL'YAROVSKIY, V.M.
KLYAROVSKIY, V.M.

Principal results of work by geologists of the Western Siberian
Branch of the Academy of Sciences of the U.S.S.R. Izv. vost. fil.
AN SSSR no.10:52-59 '57. (MIRA 10:11) 1.

1. Zapadno-Sibirskiy filial AN SSSR.
(Siberia, Western--Geology)

THEORY

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October 1968. Washington, D.C.

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the of the vol.: P. Th. Kluge, and G.A. Smiley, Imp. Ed. of Series 2.2.
Smith, *Australiana* (Melbourne) No. 1.2. Smith, *Australiana*, 2.2. Smith,
A. India, A.2. Smith, A.2. Smith, A.2. Smith, A.2. Smith, A.2.
Smith, P. Th. Kluge, 2.2. Smith, 2.2. Smith, 2.2. Smith, 2.2.
A.2. Smith, *Australiana*, 2.2. Smith, 2.2. Smith, 2.2. Smith, 2.2.
Ed. of *Australiana* Series 2.2. Smith, 2.2. Smith, 2.2. Smith, 2.2.

REMARKS: This book is intended for structural, exploration and mining geologists. For metallurgists and mineralogists, and industrial planners.

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VORSIN, Aleksandr Nikolayevich; DOIL'NITSYN, Yevgeniy Fedorovich;
TRUBNITSKOY, Anatoliy Iustinovich; SHCHERBAKOVA, Mira Yakovlevna;
~~KLYAROVSKIY, V.M.~~, otv.red.; SHCHENKOV, A.P., red.izd-va;
HYLINA, Yu.V., tekhn.red.

[Radiofrequency mass spectrometer; theory, design and construction]
Radiochastotnyi mass-spektrometr; teoriya, raschet i konstruirovaniye.
Moskva, Izd-vo Akad.nauk SSSR, 1959. 71 p. (MIRA 12:12)
(Mass spectrometry) (Radiofrequency spectroscopy)

KLYAROVSKIY, V.M.

Ninth session of the Committee on the Determination of the Absolute
Age of Geological Formations of the Department of Geological and
Geographical Sciences of the Academy of Sciences of the U.S.S.R.
Geol. i geofiz. 10:143-145 '60. (MIRA 14'2)
(Geology, Stratigraphic)

BELOUS, N.Kh.; KLYAROVSKIY, V.M.

Genetic classification of iron-ore shows in southern central
Siberia. Trudy Inst.geol.i geofiz.Sib.otd.AN SSSR no.443-59
'60. (MIRA 15:7)
(Siberia, Western—Iron ores—Classification)

KLYAROVSKIY, V.M.; FREMD, G.M.

Absolute age of Upper Paleozoic and Mesozoic volcanic rocks in southern Dzungaria. Trudy Lab. paleovulk. Kazakh. gos. un. no.2: 190-199 '63. (MIRA 17:11)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.

DMITRIYEV, A.N.; ZYKOV, S.I.; KLYAROVSKIY, V.M.; SHCHERBAKOV, Yu.G.

New data on Mesozoic igneous activity and mineralization
in the Gornyy Altai and the Kuznetsk Alatau. Dokl. AN SSSR
153 no.4:903-905 D '63. (MIRA 17:1)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN
SSSR, Predstavleno akademikom V.S. Sobolevym.

BELOUS, I.Kh., st. nauchn. sotr.; KAZANSKIY, Yu.P.; VDOVIN, V.V.;
KLYAROVSKIY, V.M.; KUZNETSOV, V.P.; NIKOLAYEVA, I.V.;
NOVOZHILOV, V.I.; SENDERZON, E.M.; AKAYEV, M.S.; BABIN,
 A.A.; BERDNIKOV, A.P.; CORYUKHIN, Ye.Ye.; NAGORSKIY, M.P.;
 PIVEN', N.M.; BAKANOV, G.Ye.; GEBLER, I.V.; SMOLYANINOV,
 N.M.; SMOLYANINOVA, S.I.; YUSHIN, V.I.; D'YAKOVA, N.D.;
 REZAPOV, N.M.; KASHITANOV, V.A.; GOL'BERT, A.V.; SILONOV,
 A.P.; GARMASH, A.A.; BYKOV, M.S.; BORODIN, L.V.; RYCHKOV,
 L.F.; KUCHIN, M.I.; SHAKHOV, F.N., glav. red.; SHAKOVSKAYA,
 L.I., red.

[West Siberian iron ore basin] Zapadno-Sibirskii zhelezorud-
 nyi basseyn. Novosibirsk, Red.-izd. otdel Sibirskogo otd-
 nia AN SSSR, 1964. 447 p. (HIRA 17:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut geo-
 logii i geofiziki. 2. Institut geologii i geofiziki Sibirskogo
 otdeleniya AN SSSR (for Belous, Kazanskiy, Vdovin, Klyarovskiy,
 Kuznetsov, Nikolayeva, Novozhilov, Senderzon). 3. Institut
 gornogo dela (for Akayev). 4. Novosibirskoye geologicheskoye
 upravleniye Ministerstva geologii i okhrany neдр SSSR (for
 Babin, Berdnikov, Coryukhin, Nagorskiy, Piven').

(Continued on next card)

BELOUS, N.Kh.---(continued). Card 2.

Tomskiy politekhnicheskii institut (for Iakimov, Gol'ts, Smolyaninov, Smolyaninova). 5. Sibirskiy nauchno-issledovatel'skiy institut geologii, geofiziki i mineral'nogo syr'ya (for Yushin, D'yakonova, Rezapov, Kashtanov, Gol'bert). 6. Institut ekonomiki sel'skogo khozyaystva (for Garmash). 7. Sibirskiy metallurgicheskii institut (for Bykov, Borodin, Rybkov). 8. Tomskiy inzhenerno-stroitel'nyy institut (for Kuchin). 9. Chlen-korrespondent AN SSSR (for Shakhov).

KLYAROVSKIY, V.M.; CHAYKA, V.M.

New data on the correlation and age of Devonian series in the
Igarka-Turukhan region. Geol. i geofiz. no.8:119-123 '64.
(MIRA 18:2)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

DISTANOV, E.O.; KLYAROVSKIY, V.M.; KOVALEV, K.R.; PERTSEVA, A.P.

Age of complex metal mineralization in the Salair ore field.
Geol. rud. mestorozh. 6 no.3:94-97 S-O '64. (MIRA 17:12)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.

KLYAROVSKIY, V.M.

Age of the intrusive rocks enclosing fluorite ore manifestations in western Transbaikalia. Geokhimiia no.11:1206-1209 M '64.

(MIRA 18:8)

ANTONOV, Yu.N.; DOIL'NITSYN, Ye.F.; KLYAROVSKIY, V.M.

Device for the quantitative determination of radiogenic argon in
rocks and minerals. Geol. i geofiz. no.3:175-183 '65. (MIRA 18:6)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

KARACODIN, V. P.; KRYZHEV, G. G.; POLOVIN, N. I.

Red deer or the reindeer and ibex are found in the northwestern part of the East Siberian Fauna. 1911. 100 pp.
No. 5129-121 '95. (MIRA 18:8)

1. Институт геологии и геофизики Сибирского отделения АН СССР,
Новосибирск и Тюменское геологическое управление.

KLYAROVSKIY, V.M.; KOSTYUK, V.P.

Age of alkali rocks in the eastern part of the Eastern Sayan
Mountains. Dokl. AN SSSR 162 no.2:405-407 My '65. (MIRA 18:5)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.
Submitted January 13, 1965.

KLYACHENKO, Y.M.; GUSEV, G.M.; ARKHIPENKO, D.K.; GOLDSOV, S.I.;
ZYRYANOVA, Ye.M.

Practice in modeling the weathering process of mica. [Trudy]
Inst. geol. i geofiz. Sib. otd. AN SSSR no.32:63-74 '65.
(SERIA 18:9)

DMITRIYEV, A.N.; DOIL'NITSYN, Ye.F.; KLYAROVSKIY, V.M.; PERTSEVA, A.P.

Use of nitrogen 15 as an internal standard in determining the
quantity of radiogenic argon. Geokhimiya no.7:874-878 -- 144

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN (MIRA 18:11)
SSSR, Novosibirsk. Submitted March 12, 1964.

ZHDANOVA, O. P., student IV kursa; ELIASCHITSKIY, A. D., student IV kursa

Device for regulating the screwdriver. Put' 1 put. khos. 6
no.9134 '62. (MIRA 15:10)

1. Stroitel'nyy fakul'tet Moskovskogo instituta inzhenerov
transporta.

(Railroads--Tools and implements)

КЛЯШНИТКИ. I.M.

Improving the quality of canned cauliflower. Kons. i ov. prom. 12 no.2:
14-15.7 '57. (MLRA 10:6)

1. Eksperimental'nyy saved Vsesoyuznogo nauchno-issledovatel'skogo
instituta konservnyy i oveshohasushil'noy promyshlennosti.
(Cauliflower)

KLYASHCHITSKIY, I.M.; SAMSONOVA, A.M.

Improvement in the technique of the production of stewed apples.
Kons. i ov. prom. 13 no.3:15-18 Mr '59. (MIRA 11:4)

1. Biryulevskiy eksperimental'nyy konservnyy zavod (for Klyashchitskiy).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti (for Samsonova).
(Apple)

KLYASHCHITSKIY, I.M.

Canning meadow mushrooms. Kons. i ov. prom. 13 no.7:10-11 Jl '58.
(MIRA 11:6)

1. Eksperimental'nyy konservnyy zavod.
(Mushrooms, Edible—Preservation)

KLYASHCHITSKIY, I.M.

Using the KXD seaming machine for sealing SKO 83-1 cans.
Kons. i cv. prom. 14 no.10:21-22 0 '59. (MIRA 12:12)

1. Biryulevskiy konservnyy zavod.
(Canning industry--Equipment and supplies)

GREYBER, V.M.; PETKEVICH, V.P.; SAMSONOVA, A.M.; KLYASHCHITSKIY, I.M.

Mechanized production line of fruit and berry juices with pulp added. Kons.i ov.prom. 15 no.4:11-13 Ap '60.

(MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut proizvodstva mashinostroyeniya (for Greyber, Petkevich).
2. Tsentral'nyy nauchno-issledovatel'skiy institut konservirovaniya i ovoshchesushil'noy promyshlennosti (for Samsonova).
3. Biryulevskiy konservnyy zavod (for Klyashchitskiy).
(Fruit juices)

SAMSONOVA, A.M.; KLYASHCHITSKIY, I.M.

Gooseberry juice with pulp added. Kons. i ov. prom. 15 no. 5:17-19
My '60. (MIRA 13:9)

1. Tsentral'nyy nauchno-issledovatel'skiy institut konservnoy i
ovoshchesushil'noy promyshlennosti (for Samsonova). 2. Briulevskiy
konservnyy zavod (for Klyashchitskiy).
(Gooseberries) (Fruit juices)

BELOUSOV, Ye.F., inzh.; VLADIMIROV, V.V., inzh.; KLYASHCHITSKIY, M.S., inzh.

Wear-resistant hard facing of suction dredge parts which
deteriorate quickly. Makh.stroi. 18 no.7:28-30 J1 '61.

(MIRA 14:7)

1. Nauchno-issledovatel'skiy institut tekhnologii mashinostroyeniya
(g. Chelyabinsk).

(Hard facing) (Dredging machinery—Equipment and supplies)

VASIL'YEVA, A.A.; KLYASHITSKAYA, A.L., kand.med.nauk; MANITA, M.D.,
kand.biologicheskikh nauk

Carboxyhemoglobin content of the blood of traffic controllers.
Rig. 1 san. 25 no. 12:77-80 D '60. (MIRA 14:2)

1. Iz Moskovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.
(CARBON MONOXIDE) (HEMOGLOBIN)
(TRAFFIC POLICE—DISEASES AND HYGIENE)

KLYASHOV, A.P., dots. (Odessa, ul. Podbel'skogo, d.6, kv.14)

Errors in the diagnosis and therapy of malignant neoplasms of the
cecum. Vest.khir. 80 no.5:99-104 My '58 (MIRA 11:7)

1. In gospi'tal'noy khirurgicheskoy kliniki (sav. - prof. A.O.
Somonovskiy) Odesskogo meditsinskogo instituta im. N.I. Pirogova i
Odesskogo oblastnogo onkologicheskogo dispansera (glavnyy vrach -
N.A. Novikova).

(CECUM, neoplasms,
diag. & ther. errors (Rus))

KLYASHTORIN, I. B.

Results of the determination of primary production in the
Atlantic Ocean. Dokl.AN SSSR 133 no.4:951-953 Ag '60.
(MIRA 13:7)

1. Institut okeanologii Akademii nauk SSSR. Predstavleno
akademikom D.I. Shcherbakovym.
(Atlantic Ocean—Phytoplankton)

KUASHTORIN, L B

(4)

- b.

- b.

- c.

reports submitted, and copies distributed at the International Council for the Exploration of the Sea, Copenhagen, 2-10 Oct 1961.

(authors were not at the conference)

SOROKIN, Yu.I.; KLYASHTORIN, L.B.

Primary production in the Atlantic Ocean. Trudy Gidrobiol. ob-va
11:265-284 '61. (MIRA 15:1)

1. Institut okeanologii AN SSSR, Moskva.
(Atlantic Ocean--Phytoplankton)

KLYASHTORIN, L.B.

Primary production in the Atlantic and Southern Oceans according to the data collected during the fifth Antarctic cruise of the diesel-electric ship "Ob'." Dokl. AN SSSR 141 no.5:1204-1207 D '61. (MIRA 14:12)

1. Institut okeanologii AN SSSR. Predstavleno akademikom A.L. Kursanovym.

(Atlantic Ocean—Phytoplankton)
(Antarctic regions—Phytoplankton)

BEKLEMISHEV, K.V.; KLYASHTORIN, L.B.

Spatial interrelations between phytoplankton and fishes in the tropical waters of the Atlantic Ocean. Turky Inst. okean. 58:40-44 '62.

(MIRA 15:12)

(Atlantic Ocean—Phytoplankton) (Atlantic Ocean—Flying fish)

KLYASHTORIN, L.B.

Diatoms on the skin of whales in the Far Eastern seas. Trudy Inst.
ocean. 58:314-321 '62. (MIRA 15:12)
(Pacific Ocean--Whales) (Pacific Ocean--Diatoms)

7

KLYASHTORIN, L.B.

Observations on greenlings (Hexagrammidae, Pisces) of the
Kurile Islands. Trudy Inst. okean. 59:104-109 '62.
(MIRA 16:11)

1. Institut okeanologii AN SSSR.

ZAYTSEVA, G.N.; KLIASHTORIN, L.B.; KIMEL', I.A.; AGATOVA, A.I.

Study of the free amino acids and amino acid composition of the protein of *Azotobacter vinelandii* during synchronous development. Mikrobiologiya 32 no.6:96' H-D '63 (MIRA 18:1)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

KLYASHTORIN, L.B.

Primary production and phosphates in the Atlantic Ocean.
Okeanologia 4 no.2:311-312 '64. (MIRA 17:5)

KLYASHTORIN, I.B.

Studies of primary production in the Antarctic. (Oceanologia 4
no.3:452-461 '64 (MIRA 18:1)

GORKIN, V.Z.; KLYASHTORIN, L.B.

Simple method for the preparation of the manometric liquid for work with Warburg's apparatus. Lab. delc. no.1:58-59 '65.

(MIHA 18:1)

1. Laboratoriya biokhimi i aminov i drugikh azotistyykh osnovaniy
Instituta biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.

GORKIN, V.Z.; KITROBSKIY, N.A.; KLYASHTORIN, L.B.; KOMISSAROVA, N.V.;
LEONT'YEVA, G.A.; MACHKOV, V.A.

Substrate specificity of amino acid oxidase. Biokhimiya 29 no.1:
88-96 Jan-F '64. (MIRA 18:12)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR i
Institut khimii prirodnykh soedineniy AN SSSR, Moskva.
Submitted April 28, 1963.

YARYM-AGAYEV, N.L.; KLYASHTORNAIA, F.M.; HUDIN, V. Ya.

Aqueous system of potassium and sodium nitrates and chlorides.
Zhur. neorg. khim. 9 no.11:2639-2644 N '64 (MIRA 18:1)

KLYASHTORNYI, I. A.

KLYASHTORNYI, I. A.: "Investigation of the process of smelting normal electrocorundum in connection with the development of a continuous process of producing it." Leningrad, 1955. Min Higher Education USSR. Leningrad Order of Labor Red Banner Technological Institute Leningrad Soviet. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Leteris' No. 47, 19 November 1955. Moscow.

8/193/60/000/009/001/013
A004/A001

AUTHORS: Vukolov, Ye.A., Klyashtornyy, I.A., Negovskiy, A.S.

TITLE: The Melting of Electrocorundum from a Bauxite Agglomerate

PERIODICAL: Byulleten' tekhniko-ekonomicheskoi informatsii, 1960, No. 9,
pp. 6-8

TEXT: In 1959 the Zaporozhskiy zavod abrazivnykh izdeliy (ZZAI) (Zaporo-
zh'e Plant of Abrasive Articles) introduced on an industrial scale the melting
of electrocorundum from a bauxite agglomerate, prior to which the Plant together
with the VNIISH had carried out industrial tests with the agglomerate made from
Hungarian bauxite. The agglomerate represents a sintered porous mass without
any hydrate water or moisture. In comparison with green bauxite, the sintered
bauxite possesses the following advantages: no melt ejections from the furnace,
a reduction of the specific electric power consumption by 12.5% and of the bauxite
consumption by 5%, a considerable decrease in dustiness of the plant shop and,
consequently, improved working conditions. Based on the test results, an
agglomeration shop was equipped at the Plant in December 1959, yielding 156,000
tons of bauxite agglomerate per year. The bauxite is crushed to a granularity

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8/193/60/000/009/001/013
A004/A001

The Melting of Electrocorundum from a Bauxite Agglomerate

of 15-0 mm, the AK anthracite, used as fuel, to a grain size of 3-0 mm. 7-8% of anthracite is added to the crushed bauxite and both materials are mixed and moistened. Then the charge is sintered in the Y3TM (UZTM) agglomeration machine having an absorption area of 50 m². The following technological parameters are established for the sintering process: height of charge layer on the agglomeration belt - 220 mm, average vacuum before the exhaustor - 750 mm water column, igniting temperature - 1,220-1,250°C, specific capacity of the agglomeration machine - 0.41 ton/m².hour, travel speed of the agglomeration belt - 1.5-2.0 m/min. After the sintering and cooling, the bauxite agglomerate is crushed to a granularity of 150-20 mm and is conveyed to the foundry. The authors present a table of the composition of the bauxite agglomerate, state the basic parameters of the melting process, and point out that the specific electric power consumption could be reduced by 14% since sintered bauxite instead of green one has been used, which resulted in saving 22,376,000 kwh in 1959. The per-hour-output of the furnaces grows by 15%. The authors report that this new and important process has also been adopted by the abrasive-manufacturing plants at Leningrad, Chelyabinsk and Tashkent. There is 1 graph and 1 table. ✓

Card 2/2

VUKOLOV, Ye.A.; ENGOVSKIY, A.S.; IORDANOV, Z.A.; MALYSHEV, V.I.;
MASHNITSKIY, A.A.; KLYASHTORNIY, L.A.; RAYZ, A.B.; POLONSKIY, S.N.

Extraction of electrocerium from bauxite agglomerate. Prom. energ.
15 no.10;16-18 0 '60. (MIRA 13:11)

(Bauxite)

(Corundum)

ELYASHTORNYI, M.I.

Interaction in the system KCl KOH $2Na$ $NaCl$ $NaOH$ $2K$,
Zhur. neorg. khim. 2 no.11:2649-2653 N '57. (MIRA 11:3)
(Potassium compounds) (Sodium compounds)
(Systems (Chemistry))

27
Concurrent diffusion of potassium hydroxide and
potassium carbonate in layers of solid polymer
during the crystallization of water

KLIASHTORNYI, M.I.

Production of metallic potassium and potassium-sodium alloys
using the reaction $KOH + Na \rightarrow NaOH + K$. Zhur. prikl. khim. v.
31 no.5:684-689 My '58.

(Potassium-sodium alloys)

(MIRA 11:6)

AUTHOR:

Klyashornyy, H.I.

SOV/80-32-2-17/56

TITLE:

Direct Electrochemical Synthesis of KO_2 (Pryamoy elektric-khimicheskiy sintez KO_2)

PERIODICAL:

Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2, pp 337-342 (USSR)

ABSTRACT:

For the direct electrochemical synthesis of KO_2 potassium amalgam was subjected to anode oxidation in a solution of potassium bromide and liquid ammonia. At the same time the potassium solution in ammonia at the cathode was oxidized by molecular oxygen. An electrolytic cell with mixer (Figure 1) was used for a thorough mixing of the electrolyte with oxygen. The precipitated KO_2 was removed from the electrolyzer by a tap. It was filtered and then washed by ammonia. Figure 3 shows the device used for filtering and washing. The density of the anode current used in the electrolytic process was 10 A/cm², the current consumption for 1 kg KO_2 500 Ampere-hours, the consumption of electric energy for 1 kg KO_2 5 kw-h, the out-

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Direct Electrochemical Synthesis of KO_2

SOV/80-32-2-17/56

put of KO_2 per 1 m² of anode 2 kg/h.

There are 4 diagrams, 2 tables, and 7 non-Soviet references.

ASSOCIATION: Donetskii industrial'nyy institut (Donets Industrial Institute)

SUBMITTED: July 26, 1957

Card 2/2

11.3950

S/153/60/003/003/011/036/XX
B016/B058

AUTHOR: Klyashtornyy, M. I.

TITLE: Solubility of the K-Na Alloy in the System
KCl - KOH - NaCl - NaOH

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i
khimicheskaya tekhnologiya, 1960, Vol. 3, No. 3,
pp. 408 - 409

TEX1: The author reports on his study concerning the utilization of KCl in the mixture with KOH at the production of the K-Na alloy on the basis of the reaction: $KCl + KOH + 2Na = NaCl + NaOH + 2K$. Compared with $KOH + Na = NaOH + K$, the advantage of the system proposed lies in the substitution of the expensive KOH by the cheaper KCl. On the basis of the phase diagram of the system KOH - KCl (Ref.2), the author states that this system can only be used if the solubility of the alloy K-Na in the system KCl - KOH - NaCl - NaOH is not greater than the solubility of this alloy in the system KOH - NaOH. Otherwise the far too great losses of alkali metals would render the proposed system uneconomic.

Card 1/2

86147

Solubility of the K-Na Alloy in the System $\text{KCl} - \text{KOH} - \text{NaCl} - \text{NaOH}$ 3/153/60/003/003/011/036/XX
3016/B058

In his study, the author determines the solubility. The experiments were made in an apparatus consisting of two telescoped tubes. Liquid melt (in mole%: 40 KCl, 60 KOH) and solid sodium metal were put into the inner tube. After 20-30 min, portions of the salt melt (about 400 g) were conducted through the liquid metal. After drawing off the reaction mixture, the metal could be well separated from the salt melt owing to its greater specific weight. The author thus attained an equilibrium metal-melt. The results are tabulated. The author concludes therefrom that the solubility of Na-K in the system $\text{KCl} - \text{KOH} - \text{NaCl} - \text{NaOH}$ at an initial content of 40 mole% of KCl and at 550°C , lies between 0.55 and 1.25% and is, therefore, not higher than the solubility of K-Na in the system $\text{KOH} - \text{NaOH}$ (1.22%). There are 1 figure, 1 table, and 2 references: 1 Soviet and 1 US.

ASSOCIATION: Donetskii industrial'nyy institut; Kafedra obshchey khimii (Donets Industry Institute; Chair of General Chemistry)

SUBMITTED: October 31, 1958

Card 2/2

S/153/60/003/003/076/036/XX
B016/B059

AUTHOR: Klyashtornyy, M. I.

TITLE: Conditions for the Forming of a Liquid Film at the Reciprocal Action of Carbonate With H_2O and CO_2

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol. 3, No. 3, pp. 494 - 496

TEXT: The author reports on his study of the absorption of air humidity and the $H_2O - CO_2$ gas mixture by crystals of potassium carbonate. He states that the liquid phase on the salt surface already develops at a water content of 0.1 to 0.5% in the salt, but this only happens when the relative humidity of the gas-air mixture is higher than the air humidity over a saturated solution. This process is expressed by equation $Q = k(h_a - h)$ (1), Q being the amount of water absorbed by a unit of surface within a unit of time; k - coefficient of absorption rate of water vapor, h_a - relative air humidity in % and h - the hygroscopic

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Conditions for the Forming of a Liquid Film at the Reciprocal Action of Carbonate With H_2O and CO_2

S/153/60/003/003/026/036/XX
B016/B058

point of the carbonate. The author states, however, that at $h_a > h$ the formation of a liquid film must not always be inferred (Ref.1). The sorption mechanism of H_2O and CO_2 is complicated here by two factors:

a) by the forming of crystalline hydrate and b) by chemical reaction. The existence of a liquid film is therefore not even certain for $h_a > h$

and $\frac{H_2O}{CO_2} > 1$. This film only appears when hydration and chemical reac-

tion proceed more slowly than the H_2O absorption. Experiments with the absorption of water produced the following data: the absorption rate by granulated, air-dried carbonate (2 to 3 mm size) at $h_a = 100\%$ and

$h_a = 92.5\%$ is shown in Fig.1. The linear dependence of Q ($g/100\text{ cm}^2$) on the time proves the existence of a film, but the determination of k (coefficient of absorption rate of water) was necessary in order to prove this unambiguously. The author determined the quantity k on the basis of the absorption rate of water vapor by the hydrated absorbent.

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Conditions for the Forming of a Liquid
Film at the Reciprocal Action of
Carbonate With H_2O and CO_2

B/153/60/003/003/026/036/XX
B016/B058

For this purpose the absorbent was spread in a thin layer between filter paper which was soaked with a saturated K_2CO_3 solution. k was calculated on the basis of the known values Q , h_a and h (equation 1). Table 1 shows the results of the experiments at $25^\circ C$ and an air humidity of 65, 77, and 100%. From the k values which agree in all three cases, the author concludes that in this case h is the relative air humidity over a saturated solution and that a film from saturated solution has formed. The crystalline hydrate is covered by a film of saturated solution. The author concludes therefrom that the water absorption by K_2CO_3 proceeds faster than the formation of the crystalline hydrate. Concerning the absorption of water and CO_2 , the author raises the question, how much more water is absorbed than would correspond to the stoichiometric ratio. A liquid film cannot develop when the amount of water absorbed corresponds exactly to the stoichiometric ratio. The experiments of 1, 2, and 4 hrs duration showed that water is absorbed at a greater ratio than the stoichiometric one, at $30^\circ C$, a relative humidity of 100% and a content

Card 3/4

8/153/60/003/004/025/040/XX
B020/B054

AUTHOR: Klyashtornyy, M. I.

TITLE: Amalgamation Process to Produce Potassium and Sodium

PERIODICAL: Investiya vysshikh uchebnykh zavedeniy. Khimiya i
khimicheskaya tekhnologiya, 1960, Vol. 3, No. 4,
pp. 691 - 694

TEXT: The author briefly interprets some results of his investigation of the process mentioned in the title for the production of alkali metals, and refers to the basic possibility of obtaining alkali metals with minimum mercury content directly in the refiner. He conducted his experiments in an electrolytic cell (Fig.1). The anode surface was 19.6 cm^2 , the current density at the anode 1560 a/m^2 , the charge 16.55 g of 10% sodium amalgam. The experimental results are given in Table 1. The experiments showed that the protection of mercury from oxidation was ensured with a minimum alkali metal content in the amalgam (0.0125%). This permitted the test to be carried out in a closed

Card 1/2

**Amalgamation Process to Produce Potassium
and Sodium**

S/153/60/003/004/025/040/XX
B020/B054

circuit and in a device calculated for 20 a; the scheme is given in Fig.2. Table 2 shows the results of experiments for the production of metallic potassium conducted at a current density at the anode of 2500 a/m², and at the cathode of 3500 a/m², an amperage of 20 a, and a potassium content in the amalgam introduced into the refiner of 0.12 - 0.15%. The alkali metal was dissolved in HNO₃ (1:1), and the mercury content determined by titration with ammonium thiocyanate. Metallic sodium was produced in a similar way. There are 2 figures, 2 tables, and 3 references: 1 Soviet, 1 US, and 1 Czechoslovakian.

ASSOCIATION: Donetskii industrial'nyy institut, kafedra obshchey khimii (Donets Industrial Institute, Department of General Chemistry)

SUBMITTED: October 30, 1950

Card 2/2

KLYASHTORNIY, M.I., OZHEREL'YEV, D.I.

Sorption of water vapors by the Na_2CO_3 - NaOH system. Zhur.prikl.-
khim. 35 no.3:676-679 M. '62. (MIRA 15:4)

1. Kafedra obshchey khimii Donetskogo politekhnicheskogo instituta.
(Water vapors) (Sorption) (Sodium carbonates)

VITOSHINSKAYA, M.I., bibliograf; OMKER, I.F., bibliograf; SHNEIDER, R.A., bibliograf; GLAZKOVSKAYA, Ye.A.; KLYASHTORNYI, S.O.; SOLOV'YEV, S.P., doktor geologo-mineral.nauk, Fed.; KULIKOV, M.V., kand. biolog.nauk, Fed.; PERLIN, S.S., red.isd-va; GUROVA, O.A., tekhn.red.

[Geological literature of the U.S.S.R.; a bibliographical year-book for 1954] Geologicheskaya literatura SSSR; bibliograficheskiy ezhegodnik za 1954 g. Moskva, Gos. nauchno-tekhn.isd-vo lit-ry po geol. i okhrane neдр, 1957. 185 p. (MIRA 12:1)

1. Moscow. Vsesoiuznaya geologicheskaya biblioteka.
(Bibliography--Geology)

VITOSHINSKAYA, M.I., bibliograf; GEKKER, I.F., bibliograf; SHMEYDER, R.A., bibliograf; GLAZKOVSKAYA, Ye.A., bibliograf; ~~KLYASHTORNYI, G.O.~~; bibliograf; SOLOV'YEV, S.P., doktor geologo-mineralog. nauk, red.; KULIKOV, M.V., kand.biolog.nauk, red.; IVANOVA, A.O., tekhn. red.

[Geological literature in the U.S.S.R.; bibliographical year-book for 1955] Geologicheskaya literatura SSSR; bibliograficheskiy eshegodnik za 1955 g. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geologii i okhrane neдр, 1959. 333 p. (MIRA 12:11)

1. Moscow. Vsesoyuznaya geologicheskaya biblioteka. 2. Vsesoyuznaya geologicheskaya biblioteka Vsesoyuznogo geologicheskogo nauchno-issledovatel'skogo instituta. (for Vitoshinskaya, Gekker, Shmeyder, Glazkovskaya, Klyashtorny).
(Bibliography--Geology)

OKLADNIKOV, A.P.; KLYASHTORNYI, S.G.

Archaeological excavations in the central Kara-Kum. Trudy VSEGEI
46:286-292 '61. (MIRA 14:11)
(Kara-Kum--Antiquities)

KLYATIS, B.D.

"Problems of the economics and organization of semi-free nutria-raising
in the USSR." Moscow Veterinary Academy. Moscow, 1956
(Dissertation for the Degree of Candidate in Agricultural Science.)

So: Knizhnaya, Letopis', No. 18, 1956

KLYATIS, Grigoriy Yakovlevich, kand. tekhn. nau' :

[Plastic retaining structures; foreign technology] Ne-
sushchie konstruktsii iz plastmass; zarubezhnyi opyt.
Moskva, Stroizdat, 1965. 61 p. (MIRA 18:8)

KLATIS, L.I.

Testing flax harvesting machinery. Trakt. i sel'khozmasb.
31 no.6:24-26 Js '61. (MIRA 14:6)

1. Ukrainskaya mashinospytatel'naya stantsiya.
(Flax processing machinery--Testing)

KHAYLIS, G.A., kand. tekhn. nauk; KLYATIS, L.M., inzh.

Some theoretical problems concerning flax gatherers. Mekh. i
elek. sots. sel'khoz. 21 no.3:52-54 '63. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut l'na (for
Khaylis). 2. Kalininakaya mashinostpytatel'naya stantsiya (for
Klyatis).

(Flax--Harvesting)

KLYATIS, L.M.

QRB-60 unloading and piling machine. Sakh.prom. JJ no.7:47-48
J1 '59. (MIRA 12:11)

1. Ukrainskaya mashinospytatel'naya stantsiya.
(Sugar beets) (Loading and unloading)

KLATIS, L.M., insh.

Our machinery for harvesting flax in separate stages.
Mekh, sil'. hosp. 11 no.6:24-26 Jo '60. (MIRA 13:11)
(Flax--Harvesting)

KLYATIS, L.M., inzh.; RYBOKOBYLENKO, V.M.

Testing flax harvesting machines. Trakt. i sel'khoz mash. 33 no.2:30
F '63. (MIRA 16:3)

(Flax—Harvesting)

ANFILOV, Gleb; ASRATYAN, N.A.; GULYAYEV, P.I., doktor biol.nauk;
LIVANOV, M.N., prof.; KRAYEMER, L.P., kand.tekhn.nauk;
VASIL'YEV, L.L.; KLYATSKIN, I., kand.tekhn.nauk

Is thought transference possible? Opinions of Soviet
scientists. Znan. sila 35 no. 12:18-23 D '60. (MIRA 13:12)
(Thought transference)

KLYATSKIN, I., inzhener-polkovnik

Our rationalizers. Tyl.i snab.Sov.Voor.Sil 21 no.5:91-93 Hy
'61. (MIRA 14:8)
(Russia--Army--Fuel)

~~KLYATSKII, S. G.~~

Radiation of antennas. Radiotekhnika 8 no.4:3-12 JI-Ag '53.
(MIRA 11:6)

1. Deystvitel'nyy ohlen Nauchno-tekhnicheskogo obshchestva radiotekhniki i svyazi im. Popova.

(Radio→Antennas)

KLYATSKIN, I. I.

USSR/Electricity

Card 1/1

Author : Klyatskin, I. G., Active Member, VNORIE

Title : Electromagnetic systems of units

Periodical : Radiotekhnika 9, 3-10, Jan-Feb 1954

Abstract : Examines two basic systems of units: the MKSA (meter, kilogram, second, ampere) system which is new and used in electricity, and the CGS (gauss system - centimeter, gram, second) which is used in physics; discusses their origin, merits, defects, and proposes a universal system. The latter uses practical units: e.g., charge in coulombs, current in amperes, potential in volts, energy in joules, etc, and can be converted to the CGS system.

Institution : All-Union Scientific and Technical Society of Radio Engineering and Electric Communications imeni A. S. Popov (VNORIE)

Submitted : December 12, 1953

KLYATSKIN, I. [G.]
USSR/Physics - Type of units

FD-916

Card 1/1 Pub 153-25/26

Author : Klyatskin, I.

Title : Problem of a unique system of units in electrodynamics

Periodical : Zhur. tekhn. fiz. 24, 1358, Jul 1954

Abstract : Letter to the editor. Suggests parameters and equations which
 would be valid in several types of designations.

Institution : --

Submitted : May 15, 1953

USSR/Electricity - Systems of Units

FD-2297

Card 1/1 Pub 90-10/12

Author : Klyatskin, I. G., Active Member, VNORIE

Title : A Universal System of Units. A Reply to a Letter Written to the Editor

Periodical : Radiotekhnika 10, 74-77, Jan 1955

Abstract : In the preceding article (pp 72-73) in the same issue (see the abstract preceding this one), G. P. Abramovich in response to the present writer's earlier proposal for a new system of units, discusses the most commonly used systems of electromagnetic units and indicates the possibility of the construction of a new system called "universal" which preserves the principal advantages of the MKSA system without any of its deficiencies. The present writer states that certain objections of G. P. Abramovich against the system are clearly caused by obscurities in the writer's earlier article in which the problem was expounded too briefly. In the present article the writer believes that he gives the necessary clarifications.

Institution: All-Union Scientific and Technical Society of Radio Engineering and Electric Communications imeni A. S. Popov (VNORIE)

Submitted : --

KLYATSKIN, I.G., doktor tekhnicheskikh nauk, professor (Leningrad)

Universal system of electromagnetic units. Elektrichestvo
no.7:61-62 J1 '56. (MLRA 9:10)

(Electric units)

KLYATSKIN, I.O., doktor tekhnicheskikh nauk, professor.

Heinrich Hertz; on the 100th anniversary of his birth. Elektrichestvo
no.3:70 Mr '57. (MIRA 10:4)

1. Leningradskiy elektrotekhnicheskiy institut im. Bonch-Bruyevicha.
(Hertz, Heinrich Rudolph, 1857-1894)

KLATSKIN, I. G.

AUTHOR:

KLATSKIN, I.G., Regular Member of the Scientific-Technical Society for Radiotechnology and Electric Communication Systems, A.S. POPOV

PA - 2291

TITLE:

Heinrich Rudolf HERTZ. - On the Occasion of his 100th Birthday
(Genrikh Rudol'f Gerts. K 100-letiyu so dnya rozhdeniya, Russian)

PERIODICAL:

Radiotekhnika, 1957, Vol 12, Nr 2, pp 3-9 (U.S.S.R.)

Received: 4 / 1957

Reviewed: 4 / 1957

ABSTRACT:

The history of the theory of the electromagnetic field is discussed and it is said that it was left to HERTZ to find out that the electromagnetic fluctuations in the vacuum or in air do not propagate momentarily but with the velocity of light and that this propagation is of a wave character. There follows a short life history of HERTZ describing how HERTZ, in the course of his experiments, discovered the wave character of the electromagnetic field. He also succeeded to prove that these waves polarize linearly and are reflected and refracted in the same manner as light waves. It was HERTZ who was the first to show in what manner work must be carried out on meter- and decimeter waves, and he constructed the first transmission- and receiving sets. Every modern antenna is still today computed as an infinite number of HERTZ-dipoles. It further follows from the theory of HERTZ that the voltage of the electric field in an electromagnetic wave decreases in-

Card 1/2

Ref 10-5-11 N 1-6
p. 2
PHASE I BOOK EXPLOITATION 30V/4001

Leningradskiy elektrotekhnicheskii institut svyazi im. M.A. Bonch-Bruevicha

Sbornik studencheskikh nauchnykh rabot, vyp. 1 (Collection of Student Scientific Projects, Nr 1) Leningrad, 1959. 87 p. 500 copies printed.

Additional Sponsoring Agency: USSR. Ministerstvo svyazi.

Resp. Ed.: I.G. Klyatskin, Professor, Doctor of Technical Sciences;
Resp. Secretary: O.N. Sapronov, Engineer; Tech. Ed.: V.V. Gal'chinskaya; Editorial Board: I.G. Klyatskin (Resp. Ed.)
Professor, Doctor of Technical Sciences, O.N. Sapronov, (Resp. Secretary) Engineer, M.P. Dolukhanov, Professor, B.F. Zhuravskiy, Student, A.A. Gol'din, Engineer, Z.I. Prokopovich, Engineer, Kh. I. Cherne, Docent, V.V. Razumovskiy, Docent, I.M. Metter, Docent, S.M. Neyman, Docent, B.I. Tikhonov, Engineer, I.M. Fomichev, I.K. Bobrovskaya, Docent, and D.N. Shapiro, Docent.

PURPOSE: This collection of articles was published in order to ac-
Card 1/4

S/123/61/000/007/021/026
A004/A104

AUTHORS: Klyatskin, I.O., Zayezdnyy, A.M.

TITLE: Ways of utilizing electronic computers in communication engineering

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 7, 1961, 10, abstract
7D93 ("Tr. Leningr. elektrotekhn. in-ta svyazi", 1959 (1960), no. 7,
(44), 3 - 10)

TEXT: The authors point out that nearly all problems in radio engineering can be solved on three types of specialized computers. 1) computers for linear problems effecting the harmonic synthesis and harmonic analysis. 2) computers for the solving of parametric and nonlinear problems carrying out the summation of linear combinations of any integral functions. 3) computers for the solving of nonlinear and correlation problems, solving nonlinear differential equations on a digital basis. There are 3 references. ✓

O. Bachin

[Abstracter's note: Complete translation]

Card 1/1